

Bilbao City Story



CASereport 101: May 2016

Anne Power

Contents

	About LSE Housing and Communities.....	5
	Foreword and acknowledgements	5
1.	Introduction – a brief history of Bilbao	6
2.	Bilbao’s industrial prowess – in spite of Franco	11
	Housing the workers	12
	Mondragon	13
3.	Democracy, autonomy and a new role for the Basque regional government	14
4.	Drama of industrial strife.....	15
	Loss of industrial jobs.....	16
	Loss of population.....	17
	Pollution.....	18
	Flooding	19
5.	Joining Europe – a flow of special funds.....	20
6.	Bilbao’s home-grown transformations.....	23
	Bilbao Metropoli 30	23
	Bilbao Ría 2000	23
	Alhondiga	27
	Transport.....	28
7.	A Changing Economy	31
	Mondragon	33
8.	The New Crisis	35
9.	Attractions of the city	38
	Conclusions	43
	Bibliography	44

List of Boxes

Box 1: Timetable of important events influencing Bilbao's development	10
Box 2: Mondragon Case Study.....	13
Box 3: Mondragon Case Study.....	33
Box 4: The Maker movement	40

List of Figures

Figure 1: Map of Spain, main agglomerations, location of Bilbao	6
Figure 2: Map of Basque Country (País Vasco) and its three provinces	7
Figure 3: Aerial map of Greater Bilbao, main municipalities and important areas highlighted	8
Figure 4: Industries and shipyards along the river Nervión	11
Figure 5: Population development, Bilbao (1842-1980).....	12
Figure 6: Industrial action, striking workers	15
Figure 7: Official unemployment rate, Bilbao (1970-1995)	16
Figure 8: Number of workers employed in manufacturing, Biscay province (1970-1995).....	17
Figure 9: Employment in manufacturing and service sectors, Bilbao Metropolitana (1975-2005).....	17
Figure 10: Population development, Bilbao (1970-1995).....	18
Figure 11: Environmental burden and derelict sites.....	19
Figure 12: European funding priorities highlighting Spain's "target status", 1989-2013	22
Figure 13: Working class housing in Barakaldo	24
Figure 14: Abandoibarra area before redevelopment.....	25
Figure 15: Abandoibarra - the iconic Guggenheim museum	25
Figure 16: Euskalduna Conference and Events Centre	26
Figure 17: Bilbao La Vieja, low income inner city neighbourhood	27
Figure 18: Alhondiga	28
Figure 19: New metro - opened 1995.....	29
Figure 20: New tram line - opened 2002	29
Figure 21: Changing needs: the 1983 Hanging Bridge on the river mouth; new port facilities in the background	30
Figure 22: Unemployment rate, Bilbao (1995-2005) %	31
Figure 23: Population development per decade, Bilbao (1970-2005) %	32
Figure 24: Population development, Bilbao Metropolitana (1980-1995)	32
Figure 25: Unemployment rate in Bilbao, 2007-2011 - impact of financial crisis.....	35
Figure 26: Iberdrola Tower, Abandoibarra	36
Figure 27: Debt (million Euros) 1999-2011	37
Figure 28: Casco Viejo	39

Figure 29: Bilbao City Council (Ayuntamiento).....	39
Figure 30: Bilbao Population, 1986-2011.....	41
Figure 31: Timeline of important events in Bilbao since the late 1970s	42

About LSE Housing and Communities

LSE Housing and Communities is a research unit within the Centre for Analysis of Social Exclusion (CASE) at the London School of Economics led by Professor Anne Power. CASE is a multi-disciplinary research centre which focuses on the exploration of different dimensions of social disadvantage, particularly from longitudinal and neighbourhood perspectives, examining the impact of public policy. We aim to understand the social dynamics of disadvantaged neighbourhoods; promote models of housing and neighbourhood management; develop ways to support community and resident self-help action, especially in social housing areas; and shape government policy.

Foreword and acknowledgements

La Fabrique de la Cité, a French foundation sponsored by Vinci, funded LSE Housing and Communities to produce seven updated city reports on Bilbao and six other European cities, following our initial reports in 2007. The financial crisis, Eurozone troubles and six-year recession have changed the fortunes of these hard-hit, former industrial cities yet again. These seven stories are up-to-the-minute, grounded evidence of the capacity of cities to recreate themselves as the Phoenix. Each city story is unusual in focussing on a single city and looking in depth at how it survives and thrives, or struggles.

The reports draw on the earlier work of Jörg Plöger and Astrid Winkler who wrote the original city reports published in 2007, and we owe a deep debt of gratitude to them for their outstanding research, their meticulous evidence and their direct accounts of visits to the sites. We revisited all the cities several times since 2008, and evidence presented in this report is based on visits to Bilbao and interviews with city stakeholders between 2008-2015. It also draws on previous research, city reports and wider evidence. We want to thank all those we met and interviewed, the projects we spent time in, all the residents, officials and programme leaders who shared their insights. In particular we thank Juan Alayo, Carolina Gutierrez, Mikel Lezamiz, Alazne Zugazaga. Without their input, the reports would not reflect the dynamic reality of changing cities.

The majority of images in this report have been taken by the authors. Where other images have been used, copyright permission is being sourced. **We fully accept responsibility for errors and omissions and welcome feedback on any of the evidence that needs expanding, updating or correcting.**

1. Introduction – a brief history of Bilbao

Bilbao, in the heart of the Basque country, is the largest port on Spain's long Atlantic coast, hemmed in on three sides by steep slopes leading eastwards to the Pyrenees, and in the north by the sea. The city grew as a fishing and trading centre near the mouth of the river Nervión long before it became part of the Kingdom of Castile in 1200. Bilbao's early development brought it the official status of city in 1300; and its strategic location between the Atlantic and Spain, between Europe and the Iberian Peninsula, made it into an international trading hub as well as reinforcing its fierce independence. The long, as yet unfathomed, roots of the Basque language, still in use today, its unique laws or "fueros", and its distinctive culture gave Bilbao and its surrounding region a distinct identity from the rest of Spain, shaping the way the city of Bilbao and the Basque country as a whole evolved.

Figure 1: Map of Spain, main agglomerations, location of Bilbao



Source: Wikipedia (<http://es.wikipedia.org/>)

Figure 2: Map of Basque Country (País Vasco) and its three provinces



Source: European Commission, http://europa.eu/abc/maps/regions/spain/pais_en.htm.

Figure 3: Aerial map of Greater Bilbao, main municipalities and important areas highlighted



Source: Port of Bilbao, 2005; modified by the author

Like other industrial cities, Bilbao developed iron works prior to the industrial revolution, preparing the way for its early 19th Century industrial growth. Bilbao quickly became one of Spain's richest cities. Its rapid population growth, from the 1840s, pushed the expansions of the city along the riverbanks of the Nervión. By 1900 it had reached 100,000 and by 1940, 200,000. By 1980 it doubled again to over 400,000. This dramatic growth led to slum conditions, intense overcrowding and appallingly inadequate sanitation and water supply - a problem only resolved in the 1980s.

Bilbao's economic growth was skewed from the outset by Spain's political instability and the unique legal-political status of the Basque region. Spain's long-run tensions between monarchy and republic finally erupted into a bitter civil war lasting three years from 1936-39, as the Spanish government lost control of its fragile democracy, and the army, under General Franco, took over.

The Basque fought firmly on the republican side, leading to a bitterly remembered bombing of Guernica, the ancient capital of the originally independent Basque Country, by the German allies of Franco. This destruction did not bring the Basques to heel, but it led to the imposition of bans, outlawing the Basque language, removing the "fueros" and all vestiges of autonomy. Under Franco, covert nationalism flourished and in 1959, the Basque revolutionary independence movement was formalised into a terrorist organisation, ETA, which sought to gain independence for the Basque Country using 'whatever means necessary'. This revolutionary movement allowed the Spanish government to become even more repressive, while young Basques seethed with nationalist fervour, secretly carrying leaves from the trees of Guernica in their breast pockets as a symbol of their Basque-ness and their determination to be independent. Bascuence, the language of the Basques, continued to be spoken and there was a distinct sense of "Basque insiders" and the rest of the population. The dictatorship lasted until 1975, with democracy restored in 1978. The País Vasco (Basque country) was by now highly industrialised, in an increasingly isolated and poor Spain.

Box 1: Timetable of important events influencing Bilbao's development

<1200	Early trading and fishing village
1200	Previously independent Basque province incorporated into Kingdom of Castile
1300	Foundation of Bilbao
1512	Creation of the Consulate of Bilbao (a body regulating trade and shipping)
1452-1841	Enjoying special trading rights
1838	First iron industry
1857	Creation of Tudela-Bilbao Railway Company and Banco de Bilbao
	Second half of 19th Century: major phase of industrialisation
1876	Beginning urbanisation of the Ensanche outside the medieval city
1890	Opening of stock exchange
1936-1939	Spanish Civil War – Basque fought on Republican side; bombing of Guernica (1937)
1939-1975	Spain under Franco's dictatorship; Basque Country stripped of autonomy
1959	Formation of ETA terrorist group
1950s/1960s	2 nd major phase of industrialisation; high immigration from poorer Spanish regions
1970s	Beginning of economic recession
1978	Spain returns to democracy; new Spanish constitution institutes 17 autonomous regions
1979	Statute of Autonomy for Basque Country under new democratic central government
1980	Democratic elections for Basque government and parliament
1981	Economic agreement between central and Basque governments
1983	Flood causes great damage in the old city
1986	Peak of unemployment; population losses continuing
1986	Spain becomes member of the European Community
1989	Territorial Plan identifies 'opportunity areas'
1991/1992	Creation of regeneration agencies <i>Bilbao Metrópoli-30</i> and <i>Bilbao Ría 2000</i>
1995	Inauguration of new metro system
1997	Inauguration of Guggenheim Museum and Euskaldina
2000	Development of Technology Parks - Zamudio
2006	ETA agreed on cease-fire
2008	Financial crisis, housing market collapse
2012	<i>Bilbao Ría 2000</i> hit by reduced land values and increasing debt
2013	City Council brings housing services back under umbrella of Bilbao Ekintza
2014	Job recovery begins

2. Bilbao's industrial prowess – in spite of Franco

Before, during and after the Civil War, Bilbao's iron and steel industry continued to grow – making Altos Hornos, the huge steel furnaces on the banks of the Nervión, internationally famous. Bilbao's port expanded rapidly to import coal from Asturias to fuel the furnaces. Shipyards expanded to build the large ships that were needed; rail tracks were laid to transport the coal, heavy goods and materials; factories built the machinery and engines required; and all the ancillary services, products and supplies grew rapidly. Bilbao became a productive and financial powerhouse that the Franco regime needed for its survival.

Bilbao was almost unique in a country that was increasingly behind the rest of Europe. It had the workforce, skills, raw materials, infrastructure, production systems, and international links to hold its own in a relatively backward country. Ironically therefore, the city's greatest growth spurt was under the hostile "iron fist" of Franco between 1950 and 1970. The price was a level of industrial pollution and environmental damage unmatched by other Western European cities; comparable to the damage seen across Eastern European industrial areas, under similarly dictatorial regimes.

Figure 4: Industries and shipyards along the river Nervión



Source: Bilbao Ría 2000 (from presentation at CRG I, March 2006).

Most of the rest of Spain was poorly educated, unmodernised, repressed and poorly connected – "Africa begins at the Pyrenees" was one common saying. Poor migrants flocked into Bilbao: from Galicia, in the extreme north west where much of the population still spoke a form of Portuguese called Gallego; and from the southern, Moorish-influenced regions of Andalucia and Extremadura. Neither group of migrants were easily assimilated, partly due to language barriers.

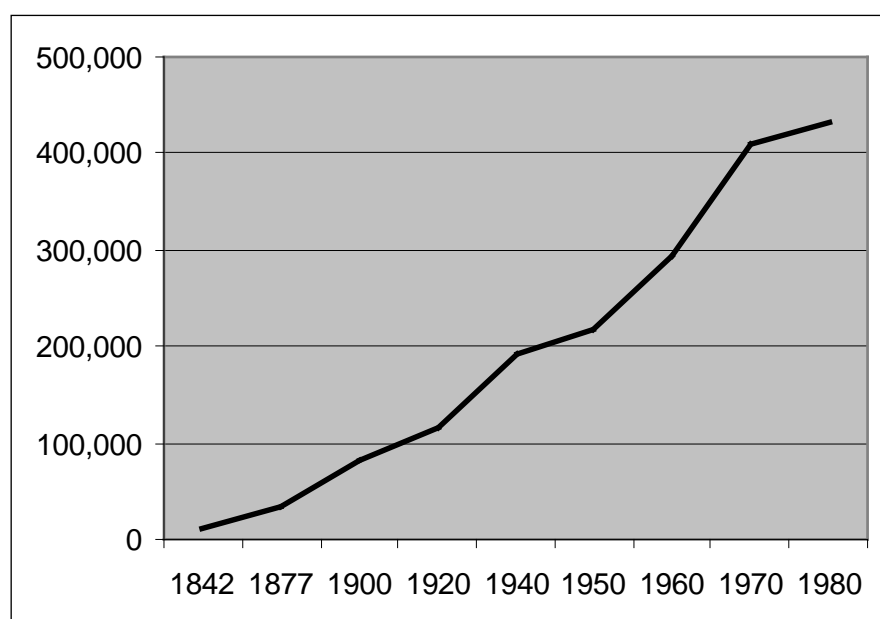
In the 1950s and 1960s, Spain was still predominantly rural and had not yet developed into the massive construction boom of the 1970s, so the hills around the old city, along the river banks above the port, and around the Altos Hornos became packed with "chabolas"- primitive, self-built, informal structures without proper sanitation, light or other services, reminiscent of the "favelas" on the hills around Brazilian cities.

Migrants scraped by on penalty low wages. The poverty was startling beside the extreme wealth of the factory owners. In truth, Bilbao had become a rich industrial hub, facing extreme inequality within, and surrounded by poor Spanish regions. It grew surprisingly strong under Franco on the back of its earlier success in spite of Basque repression. The Basques on the whole lived with this contradiction.

Housing the workers

In the 1970s, Bilbao built high-rise housing blocks at a furious pace with heavy government subsidies, continuing the process of replacing the “chabolas” and housing the workforce in basic, decent conditions that had begun in the 1950s. As the costs of the necessary infrastructure, schools, health, better water and transport rose, so the city struggled to keep pace with the rate of environmental damage caused by heavy industry. Its predominantly heavy industries and services took the short-term course of action – massive pollution of the air from the furnaces, of the soil from heavy industrial debris and waste dumping, and of the river systems from both the seepage of industrial poisons, the industrial effluents, and largely untreated sewage. Over the post-war period when the city boomed, the environment in and around the city was being wrecked as fast as the chabolas of the workers were being replaced. There was no matching government action and no environmental control – it kept Spanish products cheap in the short term, but by the 1970s the city was caught in a trap. Rising costs, rising pollution, and rising population were coupled with dramatic economic change.

Figure 5: Population development, Bilbao (1842-1980)



Sources: Eustat, 2006, Domingo, 2005.

When the oil crisis hit in 1974, and energy prices began to rocket, Spain, like the rest of Europe, took a massive hit. This coincided with Franco's death in 1975. Suddenly, the Basque country and Bilbao were faced with very serious challenges – the prospect of democracy and freedom, coupled with the steep rise in industrial production costs due to energy price hikes. The industrial workforce wanted to unionise, to gain the right to wages that matched their needs and reflected their inputs. Unions were outlawed under Franco and no form of political or workers' organisation was recognised officially. Now Bilbao was in

competition with the rest of Europe and a globalising world, while its workforce wanted comparable pay and conditions.

Box 2: Mondragon Case Study

Mondragon

One symbol of the peculiar Basque phenomenon of progress in the face of extreme suffering and deprivation lies in the Mondragon co-operative organisation which grew and flourished in this period. Mondragon is a small, traditional Basque town, an hour away from Bilbao, on the border of the three Basque Provinces of País Vasco: Vizcaya (where Bilbao is located), Guipúzcoa and Álava. High up in the foothills of the Pyrenees, Mondragon was at the centre of a poor peasant farming community, with very few resources except a shared identity, the Basque language and culture, and a strong co-operative spirit-its main defence against acute need. The people also showed a tough, resilient, self-reliance, born of the mountain history, Franco's repression, and peasant tradition.

In 1943, the local curate, Jose Arizmendarrieta, anxious to find practical ways to help impoverished local families and particularly youth, set up a technical school to train boys for the new factory and engineering trades that were fast developing around Bilbao. The idea was to develop local co-operative enterprises, producing tools and equipment that could generate income for local families, while sharing the profits by investing in education, health and social insurance.

First technical school in Mondragon with Jose Arizmendarrieta



Source: City of Bilbao.

Mondragon became a power-house of industry with over 110 independent co-operatives as part of the group; 80,000 worker-members; its own bank, the Caja Laboral; an insurance company, Lagun Aro; and a supermarket chain, Eroski. Many of the productive and co-operative ideas of Mondragon have spilled over into developments in Bilbao itself and further afield. The Spanish government under Franco passed special laws for cooperative economic and social principles in a way that has protected and promoted co-operatives in Spain to this day.

Mondragon has followed the ups and downs of the Basque economy and strengthened its social resources, prioritising innovation, new skills, education and a solidaristic impetus, that may have helped Bilbao through economic crises in the 1980s and in the early 1990s, and more recently since 2008.

3. Democracy, autonomy and a new role for the Basque regional government

By the time a democratic government finally took over in 1978, all the signs of early industrial troubles were there, but the tight control of the dictatorship and the euphoria that followed democracy diffused the problems until the 1980s- later than other European industrial cities. The Basque Country secured a uniquely favourable agreement with the central Spanish government. Strong regional autonomy was offered to all of Spain's regions. But there was a special "statute of autonomy" for the Basque region that gave it full tax collecting powers. The Basque Country pays a small annual quota (cupo) to the Central Government to compensate for its services provided in the Basque Country. As a relatively rich region in a relatively poor country, this gave Bilbao and the Basque provinces a strong financial base on which to grow.

The Basque regional government saw ancient Basque laws restored, with the Basque language made an obligatory part of all school education and the lingua franca in many areas, including Mondragon. The province of Vizcaya, along with Guipúzcoa and Álava, also had its own tier of government, as did the city of Bilbao. At each level, dedicated resources were available and Bilbao benefitted from this; not just because it was a rich city, but because the Basque country as a whole needed it to flourish. Regional, provincial and local governments are responsible for funding all services, economy, employment, education, transport, training, tax-raising, distribution of resources, planning and the environment.

The unique tax-raising powers of the Basque government are admired by the larger and more powerful region of Cataluña. An unofficial poll was held by Catalan nationalists in November 2014, with 80% of those who voted supporting independence, but the vote was ruled illegal by the Spanish government. Regional elections were called for in September 2015 with Catalan nationalist parties winning an absolute majority and claiming the result as a de-facto vote for independence. There were serious worries that Cataluña may leap-frog the compromise of Basque autonomy, straight into independence.

Bilbao and the Basque Country were, and still are, treated as special cases due to the inherent threat of violence from ETA. Although a ceasefire has held – somewhat uneasily – since 2006, there is a constant political undercurrent of nationalism, and the Basque Nationalist Party is in power at all levels of regional, provincial and local government.

With strong local and regional control over decisions and resources, and a strong democratic mandate, the Basque government and city of Bilbao are quick to identify local economic and social problems and challenges. A powerful, many-sided debate was unleashed on how best to respond to the crisis of de-industrialisation triggered by the oil crisis, the growing industrial troubles, the strong social divisions particularly around immigration, the over-reliance on heavy industry, the poor connectivity, and the serious environmental pollution.

4. Drama of industrial strife

Many illegal and clandestine forms of popular organisation had developed under Franco. This outlawed labour movement became stronger over the 1970s, while workers were still repressed, leading to a sharp rise in militancy. Soon Bilbao's docks became the scene of industrial conflict. Awareness was rising of the horrible working conditions, the extremely low wages, the still crowded and poorly serviced working class suburbs, the lack of education, and the intense pollution. Modernisation and mechanisation of industry, the opening up of Spain's borders to Europe, the return of now more international, more assertive, better informed migrants to a free Spain, all led to a transformed economic, political and social climate.

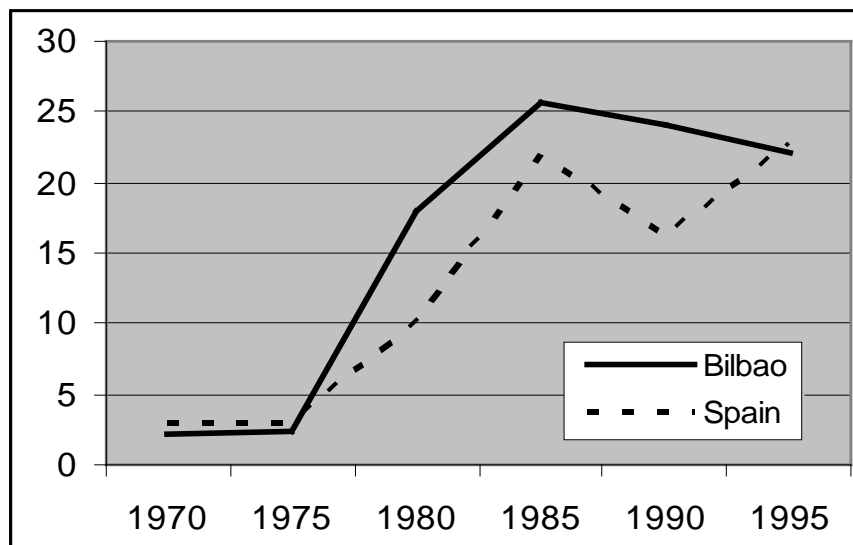
Figure 6: Industrial action, striking workers



Source: Bilbao Ría 2000 (from presentation at CRG I, March 2006).

From 1975, unemployment in Bilbao began to climb steeply, from a low level of around 3% in the early 1970s to 25% by 1985. As jobs went, so militant action grew. Meanwhile, the outflow of migrants from Spain's Southern and Western regions slowed as prospects at home improved and promises of jobs in Bilbao withered. Realising that things had to change as job losses grew, the new Basque government sprang into action. The City Council launched public discussions about how to reshape the city. Grand strategies were in vogue but new ideas gradually emerged.

Figure 7: Official unemployment rate, Bilbao (1970-1995)



Source: Eustat, 2006, Gómez, 1998.

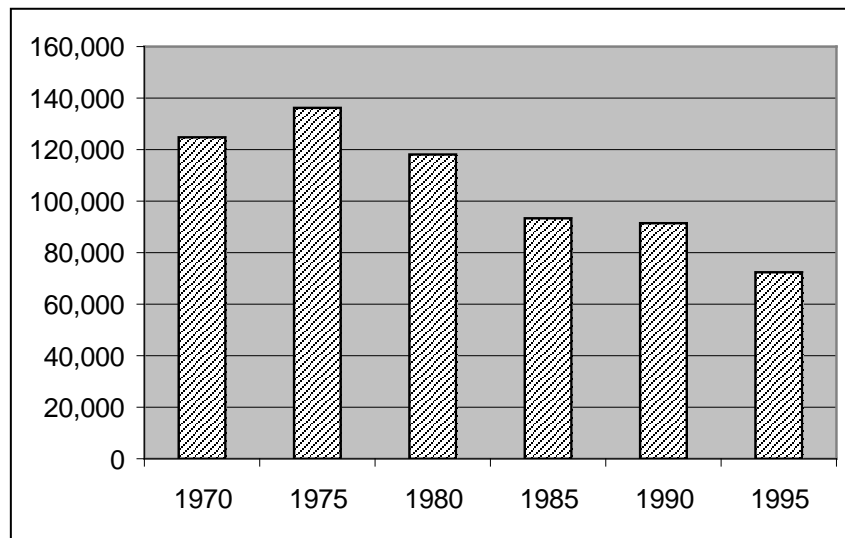
Four simultaneous crises in the 1980s provoked immediate and urgent action:

- The loss of industrial and manufacturing jobs;
- The loss of population;
- Extreme pollution of the main water systems and lack of modern sewage treatment;
- The disastrous floods in the old city exposing extreme decay and deprivation

Loss of industrial jobs

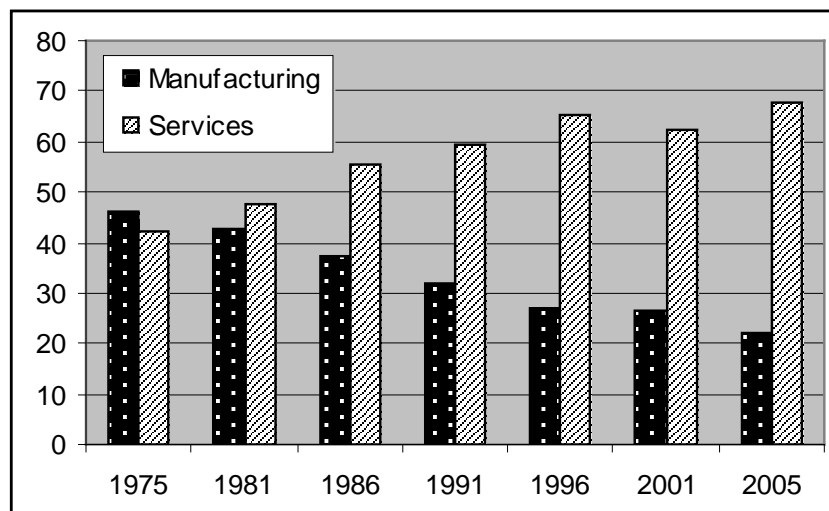
In the early 1980s, when the Basque government was young, expectations were high and the regional and national importance of Bilbao was widely recognised. The city attracted support from the regional and provincial governments, although they too were struggling with de-industrialisation on a wide front and terrorist troubles. Disinvestment, both from abroad and from other parts of Spain, was a strong negative force, while the decline of manufacturing jobs continued right up to the present: Bilbao lost 60,000 manufacturing jobs up to 1995, and youth unemployment reached 50% in the 1980s. The city simply could not create alternative jobs fast enough, even though services grew rapidly as a share of employment, as did public administration. By 1985, unemployment peaked and finally began a slow decline.

Figure 8: Number of workers employed in manufacturing, Biscay province (1970-1995)



Source: Eustat, 2006, Gómez, 1998.

Figure 9: Employment in manufacturing and service sectors, Bilbao Metropolitana (1975-2005)



Source: Eustat, 2006.

Notes: 2001 and 2005 values for provincial level only, which might vary slightly from the values for Bilbao Metropolitana.

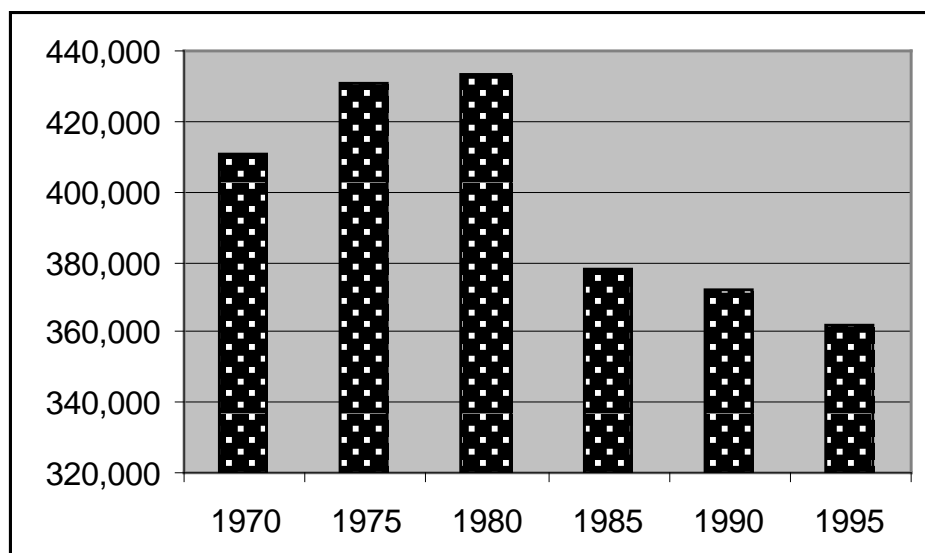
Manufacturing excludes construction sector

Loss of population

The population of Bilbao plummeted from 438,000 in 1980 to 380,000 in 1985, and continued to decline until 1995. In part this was due to boundary changes in 1983 with some areas separating from Bilbao and becoming independent municipalities, there was also a drive to living in lower-density more affordable areas, but it was also due to the massive job losses, largely affecting the least skilled, lowest paid, most insecure workers - mostly the migrants from Andalucía and Galicia. Many of whom drifted back to their home areas. The working class suburbs surrounding Bilbao, along the industrialised banks of the Nervion, Barakaldo, Sestao and Basauri, also lost population. In fact, in the early 1980s, the whole metropolitan area

lost population and until the mid-1990s the province and region declined too. However, in spite of depopulation (with some later recovery), Bilbao remained an extremely dense city and still is today.

Figure 10: Population development, Bilbao (1970-1995)



Source: Eustat, 2006.

Pollution

At the very point where air, soil and water pollution should have begun to drop, through factory closures, the cumulative impact of 100 years of “wild industrial dumping” caught up with the city’s eco-system. By the 1980s, the river Nervion was “ecologically dead”. As factories and shipyards declined, bare sites, disused buildings and abandoned machinery became available for other uses. But the levels of toxic poisoning were so high that both water and land were contaminated to dangerous levels. In Barakaldo one third of the land, buildings and infrastructure was abandoned. A long, slow, costly clean-up began, starting with the water treatment plant which was not completed until the late 1980s. This was by far the most serious and hazardous environmental challenge, as household sewage mixed with chemical, mineral and other industrial pollutants in the large, deep river systems that drain from the deep mountain valleys into the river basin that runs through Bilbao.

Figure 11: Environmental burden and derelict sites



Source: Bilbao Ria 2000 (from presentation at CRG I, March 2006).

Flooding

Maybe the most decisive action came following the devastating floods in the old city, the “Casco Viejo”, in 1983. Immediate rescue operations revealed just how deep the poverty, over-crowding and neglect had been under the almost 40 years of Franco’s rule. Renovation work tackled homes and small businesses together, as they often shared the same premises, so support for small local enterprises that kept the “Casco Viejo” alive became vital. New training and enterprise support were initiated by the city council. These measures paved the way for much wider, more comprehensive programmes.

The realisation of just how deep Bilbao’s troubles were, was countered by a strong, unified focus from regional, provincial and city governments on the job of recovery. A new “post-industrial” philosophy was born.

5. Joining Europe – a flow of special funds

Spain, under the new government, was enthusiastically pro-European; and nowhere more so than in the Basque country - always a cross-over point to Europe. Bilbao, at its heart, had risen and thrived on its international links. Its trade across the Atlantic and with the rest of Europe had made it rich and kept it semi-autonomous until Franco. In fact, the Basque people, with their Basque language, were firmly established across the French border areas of the Pyrenees, as well as in fishing enclaves in North America. The many European emigrants from the Basque country after the civil war and during Franco's regime also strengthened these ties with Europe.

Spain's admission as a full member of the European Union in 1986 marked a new turn for the Basque country. It opened the door to five broad forms of European financial aid that were a life-line for stricken ex-industrial cities, like Bilbao, that had suffered politically, economically and socially, and were still mired in problems. First, the regional support funds favoured the conversion of former industrial areas with large, disused industrial sites, buildings, and infrastructure. Second, there was a strong drive to clean up Europe's contaminated and polluted environments, particularly soil and water systems, as well as surrounding countryside. Third, there was a sense of great urgency over retraining and reskilling the large unemployed, ex-industrial workforces. Fourth, the new knowledge economy needed university-led technological research, international exchanges, and start-up support. Fifth, the SME sector was alive, adaptable and now, potentially, the best hope for the new economy. There were also many social and urban programmes which helped with the integration of migrants and the renewal of poorer neighbourhoods.

The European Union proved its worth many times over in the 27 years of Spain's membership since it joined in 1986. The Basque country was a particularly strong beneficiary, especially in the late 1980s and early 1990s because European regional aid, structural funds, economic investments following deindustrialisation, environmental remediation and labour market interventions all attracted considerable funds. Zones in steep industrial decline were the greatest beneficiaries of the new wider Europe.

In the earliest phase, from 1986-89, the most significant projects in Bilbao were: the beginnings of a new technology and enterprise zone in Zamudio Park on the outskirts of Bilbao; funds to help complete the water treatment system; support for the building of the first underground metro line. Special funds were also made available for converting steel furnaces and shipyards to alternative uses. Other outward-facing initiatives included an international fair of Bilbao products, a programme to support SMEs focussed on innovation, and the development of special enterprise centres to house start-ups – often using reclaimed industrial buildings.

European funding also helped the Basque government establish a Centre of European Information and support for SMEs. Europe also part-funded biomass development from wood waste, biofuel from recycled cooking oil and significant wind and solar developments, utilising the local climate. Today, these developments are evident all around the city and surrounding country. The rapid integration with Europe and quick access to special funds was facilitated by three distinct factors:

- a) The acute industrial shock in Northern Spain and the latent fears about cross-border terrorism and extreme nationalism in the newly born Spanish democracy;

- b) The swift assumption of autonomy and control by the Basque government, and the open dialogue launched by the city in response to the crisis, giving an immediate and localised sense of reality to the proposed pro-European projects;
- c) The outward-looking mentality of the Basques, coupled with a fierce sense of independence within Spain, which advanced the subsidiarity principle of Europe and the regional autonomy of Spain.

Under Europe's umbrella, Bilbao was able to begin a serious restructuring of its troubled economy and a major clean-up of its fond water systems, including for the first time in its industrial history:

- a proper sewage treatment system;
- new high-tech business parks;
- significant urban renewal;
- retraining and reskilling through the large and open-minded SME sector;
- a commitment to the environment;
- New transport infrastructure.

It was a remarkably ambitious process which began well, but faced a long haul.

In the next phase of European funding (1989-93), the Basque country took on the commitment of a major, long-term economic restructure in order to modernise its industrial base (still very big at 30% of the economy); increase competitiveness in skills, productivity, and innovation; diversify the economy and develop services; and address energy and environmental problems.

The region qualified for Objective 2 funding due to high unemployment, the closure of steel works, ship building and metals, the ruinous industrial legacy and environmental damage. These all became a major focus of spending. Bilbao's implementation on the ground included: new funding channels to support SMEs; international marketing of local firms and products; and a major conversion to gas with new accompanying infrastructure, including new pipelines. Bilbao became a growing importer of gas, thereby supporting the recent expansion of the port. Spain aims to become a key transfer point for European gas supplies, including imports from Algeria via a southern pipe line, and from North America in liquefied form via Bilbao.

Through environmental actions, the Basque county and Bilbao, along with the rest of Spain, gradually managed to pull up to European standards. The improved public transport system greatly reduced air pollution. The push for higher investment in new technology – the Parque Tecnológico de Zamudio is one example – helped at least 200 enterprises modernise and compete, with a strong focus on environmental business. Maybe the most striking social investment was the retraining of at least 70,000 people, developing new technical skills for new types of work.

In the next funding phase, 1994-99, major investment was directed to the Port of Bilbao, moving it down river and opening up again the prospect of expanding trade and shipping – which has indeed happened.

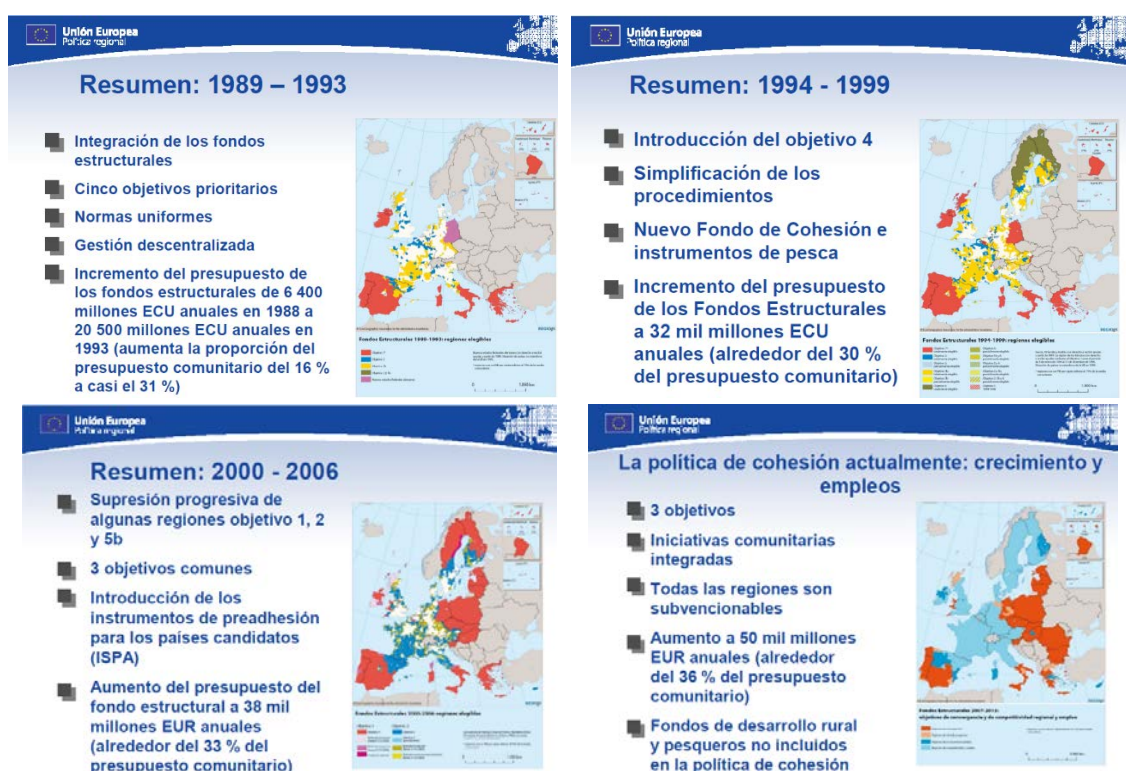
European funding programmes continued to help the Basque country and Bilbao in three main areas:

- The promotion and support of SMEs operating in innovative, often green, technologies – including training and technical support for small-scale entrepreneurs and provision of space for start-ups along with business advice;
- Funding for environmental reclamation and clean ups due to the still large legacy of damage and unused brown-field sites, particularly in the poorer suburbs;
- A focus on social cohesion, including job training, youth training, and investments in upgrading poorer areas.

Economic competitiveness, new economic growth, internationalisation and cohesion dominate the European funding language, while environmental commitment and renewable energy retain a high profile. Throughout, there has been a strong focus on agriculture and fishing, partly linked to the traditional Basque economy, partly out of environmental concern.

Due to the Eurozone crisis, great uncertainty now surrounds funding programmes, but post-industrial cities are still a magnet for particular funds, such as European Regional Development Funds. There is now a much stronger focus on skills, employment, migrant integration, and technological innovation.

Figure 12: European funding priorities highlighting Spain's "target status", 1989-2013



Source: 25 anos de Euskadi en Europa, Eusko Jaurlaritza Gobierno Vasco, 2012.

6. Bilbao's home-grown transformations

European funding was only part of the story. Local plans made possible the backing from Europe. A breakthrough was heralded in the early 1990s with the formalisation of a clear city plan for tackling Bilbao's decline in 1991. Two bodies, structurally separate from the local, provincial and regional governments, were set up by a partnership of both public and private organisations, in part funded by the Basque and central governments with local representatives on their boards. Bilbao Metropoli 50 and Bilbao Ría 2000, in different ways, played distinct and decisive roles in reshaping the post-industrial economy and image of Bilbao that city leaders aimed for.

The City Plan, boosted by joining the European Union and finding new resources to kick-start new ideas, adopted a strongly internationalist focus, aiming to become an important hub for links with Europe and America. To achieve this, key aspects of the city required radical conversion: most importantly, the long water front, the energy and waste infrastructure, and transport links. Despite the sea, Bilbao had always been somewhat separated in its coastal basin by the surrounding mountains. The Plan therefore had a strongly physical, environmental and place-making focus, which was to prepare the ground for wider economic transformations in order to project Bilbao as model of change.

Bilbao Metropoli 30

Bilbao Metropoli 30 became a form of think-tank, lobby organisation and catalyst for investment for the city and its wider metropolitan area, with a population of 1 million and 22 separate municipalities. To this day, it brings together public and private sector partners to develop and promote the changing image of Bilbao as a post-industrial, European city. It organises research and documentation of key developments in the metropolitan area; it uses Basque identity and culture as a unifying force; and it supports civic leadership through active engagement with all parties, actors and interests. Its broad membership reflects these interests. Its organisers say it has filled the space between elected politicians, civic officials, the private sector and civil society through promoting ideas, providing evidence, brokering new approaches to problems, generating a more groundbreaking dialogue on critical social, environmental, cultural and resource topics.

Bilbao Ría 2000

Bilbao Ría 2000 was established as a much more interventionist and pro-active body, owned half by the Spanish government, half by the Basque administration. Its core purpose was to take ownership of disused industrial land and infrastructure in Bilbao and neighbouring municipalities such as Barakaldo, and turn these into new productive spaces, using its investment potential to clean them up, develop and sell them on. Land came mainly from the port and railway authorities.

Figure 13: Working class housing in Barakaldo



Funding came from all levels of government and the EU to reclaim and reuse major areas along the river. Bilbao was able to take commercially promising risks in amenities, housing, services, commerce, tourism and other uses. Any profits or gain in land value had to be ploughed back into the reinvestment objectives of Bilbao Ría. Decayed central neighbourhoods adjacent to the “Casco Viejo”, known as “Bilbao la Vieja” (old Bilbao), were renewed and new neighbourhoods on the sloping outskirts of the city were created. The most visible, best known and most recognised new development was the Abandoibarra area, where the Guggenheim Museum is located, in the reclaimed docks, attracting nearly a million visitors every year since it opened in 1997.

The Guggenheim was built as part of a huge reclamation project along the whole water front industrial zone from the old city to the much newer areas. The Guggenheim success was quickly followed by the construction of the nearby Euskalduna Conference and Events Centre, built at half the cost of the Guggenheim, on the site of the closed down shipyard and attracting over half a million participants to hundreds of events every year. Next to it is a well-used shopping mall. The Palacio Euskalduna, on the river front along from the Guggenheim, has been an enterprise success story. It held 744 events in 2013, let out at 92% capacity, with almost 500,00 people visiting for major conferences, small seminars and workshops, concerts and shows, including orchestras, choirs, bands, operas, ballet and other dance productions. The centre has a highly rated energy performance certificate, complete accessibility and outstanding management performance. Several of its conferences are major international events attracting world leaders in health, industry, communication, advanced medicine and ophthalmology, veterinary science, and sports rehabilitation. Its revenue generation and wider economic impact on services in 2013 was calculated at 78€ million additional revenue to the Basque economy. Its sales have been the least affected by the recession of all Spanish Congress Centres and it is profitable without any public subsidy.

Figure 14: Abandoibarra area before redevelopment



Source: Bilbao Ría 2000 (from presentation at CRG I, March 2006).

Figure 15: Abandoibarra - the iconic Guggenheim museum



Figure 16: Euskalduna Conference and Events Centre



Source: Euskalduna Jauregia Bilbao

The conference centre has generated a year-round new industry in “business tourism” which the Guggenheim and other attractions obviously encourage and support. There are many spin-offs in the small local services it generates demand for, and in the promotion of Bilbao’s name and produce. These landmark attractions win foreign acclaim, but more importantly bring foreign visitors, new resources and new enterprises – justifying the impressive, if environmentally unsustainable, expansion of Bilbao airport, its port and its motorway system. Bilbao has tripled the number of passengers arriving from abroad since 1994. It reached 3.8 million in 2005 and this continued to rise until the 2010 Euro crisis.

These leading flagship projects were a major force in the much wider task of image change, job transformation, urban renewal and innovative enterprise. Bilbao Ría have targeted other areas in Bilbao. Zorrozaurre is part of the old harbour, but was cut off from the city through industrial decline and loss of function.

Bilbao Ría 2000 redirected proceeds of its more profitable ventures to restoration and upgrading work in poorer neighbourhoods, including Barakaldo, but particularly to Bilbao la Vieja near the port area where many immigrants live. Some older blocks were pulled down and replaced, which revealed just how poor and crowded conditions were. There were criticisms of gentrification but a recognition that the area needed upgrading. Overall, Bilbao Ría 2000 played a decisive role in the transformation of areas of greatest damage and social distress into economic assets, social amenities, liveable neighbourhoods. But when the financial crisis hit Spain, and land values collapsed, the organisation found itself debt-laden to a point where the city and region decided to wind its operations down significantly.

Figure 17: Bilbao La Vieja, low income inner city neighbourhood



Alhondiga

One of the most impressive but costly developments is the careful restoration and internal rebuilding of the Alhondiga: an imposing former warehouse and wine store for the famous Rioja wines, which used to be imported via Bilbao. Now preserved, it is a public amenity in the city centre. The entire ground floor is an internal open space with giant ornate pillars every few yards supporting the floors above, containing the super-modern “media-tec” public library, a swimming pool and gym, a theatre, eight cinemas and several meeting venues. It attracts around 350,000 visitors a year, mainly local residents. There are 7000 swimmers and gym users a day, 3000 daily library visitors ranging from children, to students, to elderly people. The annual centre budget of €11.5 million is bigger than the entire city budget for the city streets and public building maintenance. Its future must lie in revenue generation - it recently hosted a large conference of world mayors and an international literary congress with three Nobel Prize winners. But it may find it hard to compete with the Euskalduna and Guggenheim in this. Its budget has been cut by €200,000, shrinking the number of events. The survival of this fantastic asset for the city depends on a much more robust business plan.

Figure 18: Alhondiga



Source: Azkuna Zentroa

Transport

One huge, long-term change in Bilbao has been the investment in transport infrastructure. The underground Metro system, built in the 1990s, has won international acclaim, partly thanks to its star architect, Norman Foster. The outer areas of the city are now much better connected to the city centre. The bus services, greatly expanded, have won awards for being comprehensive, fast and accessible. The airport has more than doubled its flights over 10 years. Both the new tram line round the curving river front of the reclaimed dock areas, linking the bus terminal to the old city, past the Guggenheim and Euskalduna conference centre, and the new fast suburban train line out to Barakaldo and beyond have accelerated journey times and brought the suburbs closer to the city. While in the 2000s there were fears that this would lead to sprawl building, the crisis in construction and the housing market collapse have reduced that risk and encouraged a refocus on dense city centre development, such as the major regeneration project around the bus terminal.

Figure 19: New metro - opened 1995



Figure 20: New tram line - opened 2002



Figure 21: Changing needs: the 1983 Hanging Bridge on the river mouth; new port facilities in the background



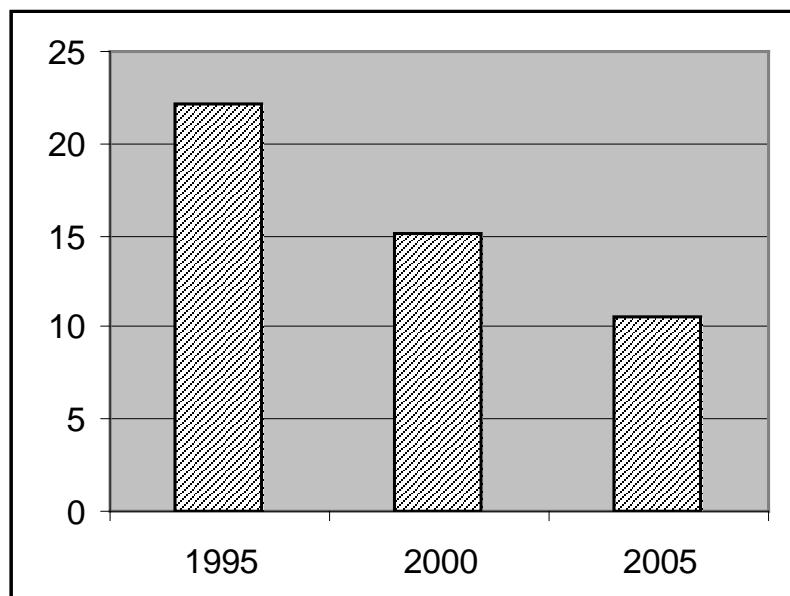
The big transport casualty of the recent recession has been the suspension of the high-speed rail link, the AVE, between San Sebastian, Bilbao and Vittoria, forming the Basque train links with Madrid. The unfinished line is literally hanging in mid-air, over the motorway towards Mondragon, with steel rods sticking out of concrete, high above the cars, going nowhere. Work on the line was suspended when Spain faced the threat of a banking collapse. It seems likely that the Basque Y, as the new line is called, may be finished in the next few years, if not all at high speed, whereas other parts of the ambitious AVE network will simply “hang” unfinished.

In spite of the problem of unfundable high-speed rail links, the huge investments in other parts of the system over 10 years since 2006 have paid the city back handsomely. The planning and zoning powers, the external funding, the fiscal autonomy resulting from the rise in values resulting from investments, the vision and imagination of city partners, the vision of international architects, have all delivered incremental changes in the way Bilbao now functions as a city.

7. A Changing Economy

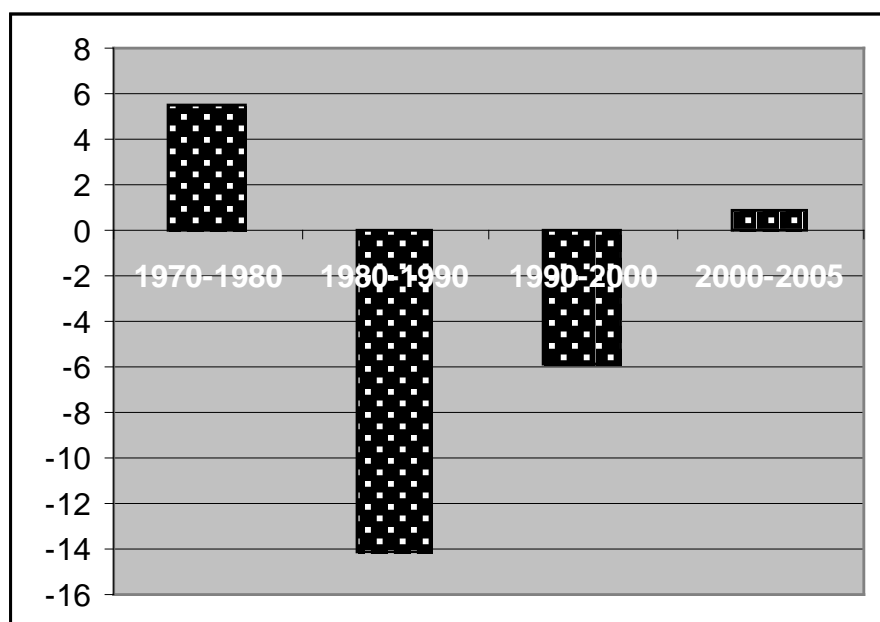
All through the long crisis and restructuring that began in the early 1980s, Bilbao has been gradually reshaping its economy. European membership catapulted it into the knowledge and service sectors. Technology and innovation became the drivers of new enterprise. While big landmark industries disappeared, a wealth of small and medium enterprises stayed, adapted and proliferated. Retraining, external marketing, new technology, links between sectors and financial support were offered as buttresses to vital parts of the economy. Employment in hospitality and tourist-related services rose steeply, as the numbers of tourists arriving into Bilbao airport rose. Jobs in services grew from around 42% in 1975 to 65% in 1995. The unemployment rate fell steadily from the 1980s, from 25% to around 20% in 1997 and 11% by 2004. Population loss also slowed dramatically around the same time. Jobs were created in reclamation, construction, rebuilding and restoring, as well as in new high-tech sectors.

Figure 22: Unemployment rate, Bilbao (1995-2005) %



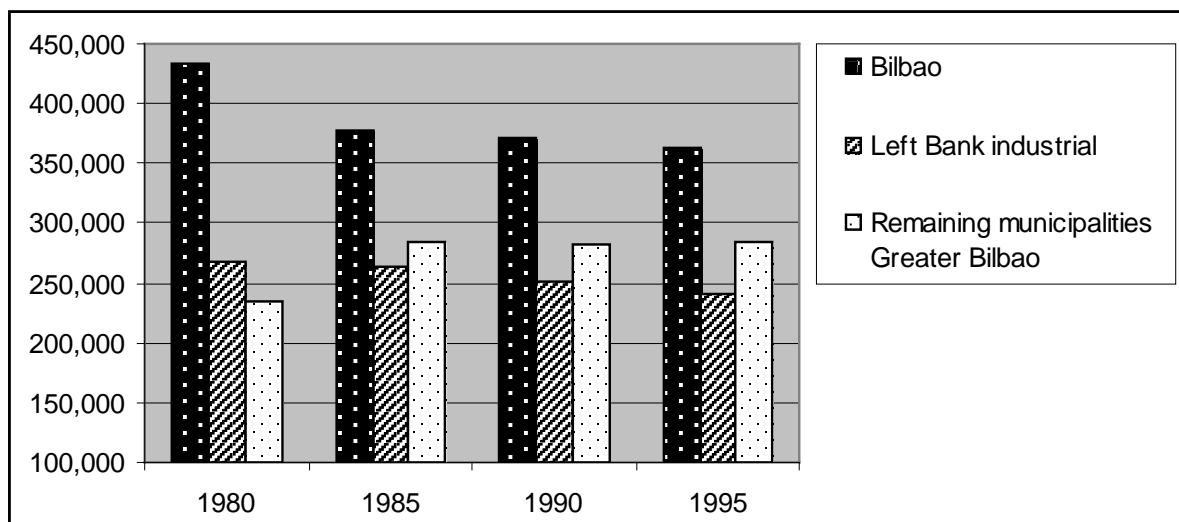
Source: Eustat (online), 2006.

Figure 23: Population development per decade, Bilbao (1970-2005) %



Source: Eustat online, 2006.

Figure 24: Population development, Bilbao Metropolitana (1980-1995)



Source: Eustat (online), 2006.

The new Zamudio technology park, supported by EU funding, went from strength to strength. Located close to the expanded airport, it built strong international connections, developed and housed over 300 businesses and employed 6000 people by 2006. Industrial jobs declined dramatically as a share of the total - from 48% in 1975, to 28% by 1996, and 22% by 2005.

The combined impact of investment in infrastructure, land reclamation, environmental remediation, new buildings, housing, neighbourhood renewal, new technology, enterprise creation, new services and, particularly, tourism of all kinds, was to create not only new jobs, new skills and new enterprise, but to

transform the physical and social conditions of the city. Overall, the number of jobs in the metropolitan area grew from 267,000 in 1995 to 380,000 in 2005.

The city council itself played an important role in Bilbao's economic transformation alongside the provincial and regional administrations. The council has remained strongly allied to Basque nationalist politics and feelings, but firmly against Basque separatist movements and any form of violent opposition. The region has used its tax collecting powers not only to invest in all the new developments but also pay down its debts, incurred during the transformation process. By the time the new financial crisis hit in 2008, the city of Bilbao itself was virtually debt free.

Box 3: Mondragon Case Study

Mondragon

A revealing example of economic change and resilience is the development of the Mondragon co-operatives. By the early 1980s, the town of Mondragon had grown and modernised as co-operative factories, schools, bank, university and other new enterprises mushroomed. New workers arrived from the declining agricultural sector and from surrounding Basque villages and towns. Mondragon has remained very Basque and the lingua franca is clearly the local Basque language.



The very first co-operative founded by the first intake of pupils into the original co-operative school became a highly successful fridge, washing machine and oven producer, called Fagor, making at its peak in the early 2000s 4000 machines a day and employing 5000 workers. This industry thrived on the back of Bilbao's great housing construction boom in the 1980s and 1990s. Mondragon became an emblem of the Basque talent for enterprise, production, creativity and collective shared progress. The co-operative governing body agreed a pay ratio of 1:4, unless the enterprise was very big in which case it could rise to 1:7. Equality and sharing were strongly embedded, but so too was hard work.

The co-operative organisation of Mondragon developed its own university to ensure proper technical skills, to focus on engineering, innovation and research. Mondragon was an incubator of new ideas and spin-off co-operatives that often transplanted to Bilbao or inspired sister organisations there. By 2008, 60 years after the founding of the first technical school, when Spain's housing bubble burst, the bottom fell out of the white goods market and Fagor struggled to survive. But other arms of the co-operative had grown strong over the 2000s using new technology, the knowledge economy, advanced medical technology, and advanced manufacturing. Its reputation for high-tech production became internationally recognised. On a listed high-rise estate in Sheffield, undergoing major retrofit and remodelling, is a recently installed

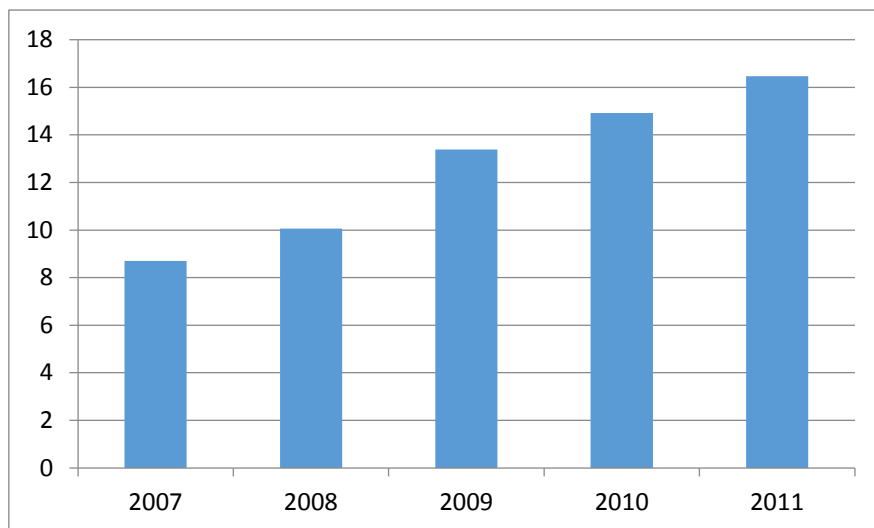
Mondragon-made lift carriage, machinery and lift shaft: “it was the best model, for the best price”. All the kitchen equipment for the new flats was made by Fagor in Mondragon. Mondragon contributed its advanced manufacturing know-how to other complex engineering projects, including rebuilding New York around the site of the destroyed World Trade Centre. Emblematic as this story is, Mondragon – like Bilbao, the Basque country, and Spain – underwent a serious, long and troubling recession since 2008.

From 2011, Fagor began to record substantial losses as competition from China made Fagor products internationally uncompetitive. When the housing market collapsed in Spain and with it the sale of stoves, fridges and washing machines, Fagor was bailed out until 2014 by the savings of the Mondragon co-operative as whole. But in 2014, the start-up factory closed and the workers mostly redeployed to other growing co-operatives. Only about 100 workers were still unplaced by the time it closed its doors.

8. The New Crisis

Fagor reflects what happened to the Spanish economy. Spain was extremely badly hit by the 2008 financial crash. Its housing bubble left it with over a million unsold homes and over 3 million empty properties. It led to the re-possession of half a million homes with ensuing homelessness for the evicted, indebted owners. There were six million out of work at the peak of the crisis. The jobless rate among young people under 25 rose to over 50%. Its savings banks (the Cajas) were in deep crisis, due to bad management, reckless credit risks and corruption. The government had to intervene, reducing their number from over 200 to 43. Mondragon's Caja Laboral, not heavily tied up in mortgages, fared better, but it was still forced to merge with another Basque co-operative Kutxa under strict new Spanish laws, making the combined Caja stronger. Even the Banco Bilbao Vizcaya Argentaria moved its headquarters from Bilbao to Madrid as a sign that a second city, threatened with renewed shrinkage, might not be strong enough to weather the storm.

Figure 25: Unemployment rate in Bilbao, 2007-2011 - impact of financial crisis



Source: City of Bilbao.

One of the symbols of Bilbao's economic uncertainty is the monumental Iberdrola Tower built on a reclaimed site and originally intended to provide office space for the provincial government. However, due to the economic crisis, the government withdrew and Spain's biggest and most successful energy company, Iberdrola was persuaded to build their new headquarters on the site.

Figure 26: Iberdrola Tower, Abandoibarra



Source: Bilbao Ekinza.

Bilbao and the Basque country as a whole have fared less badly than the rest of Spain, with unemployment far lower – 17% at its peak in 2013, compared with Spain’s 27%. These are still alarming figures, reflecting the reduction in jobs in almost all sectors, except health, social support, education and creative entertainments. As the crisis deepened and continued to extend its impact, back-up services increased as companies struggled to survive. The biggest overall fall in jobs was in housing and construction, as projects went on hold and houses remained unsold. Although many construction companies, housing projects and Bilbao Ría itself were badly hit by the housing collapse, the city and region had not gone into the frenzy of building that wrecked the economy of other parts of Spain. There are empty houses, unfinished developments and unsold units (particularly hurting development-driven organisations, like Bilbao Ría), but overall crushing debt, bank defaults and mass repossessions have been avoided in the Basque region.

Overall, virtually every sector of the productive economy was in decline over a four year period to 2013. The city government took strong steps to address its own funding crisis as revenues fell and emergency calls on its reduced funds increased. The following summary of the main steps shows the determination of the city and regional governments and their key role in shaping the response to the crisis. It stands out from other Spanish regions.

First, the city amalgamated the various out-reach bodies it had created to promote Bilbao, to develop skills, to tackle neighbourhood problems, and to regenerate buildings, into one umbrella city structure, run within the council: Bilbao Ekinza. It also included external and international promotion, enterprise development, tourism, social support, and emergency help. This amalgamated, in-house body saved on organisational and building costs. It also made public buildings available for new activity, generating some income and reducing running costs.

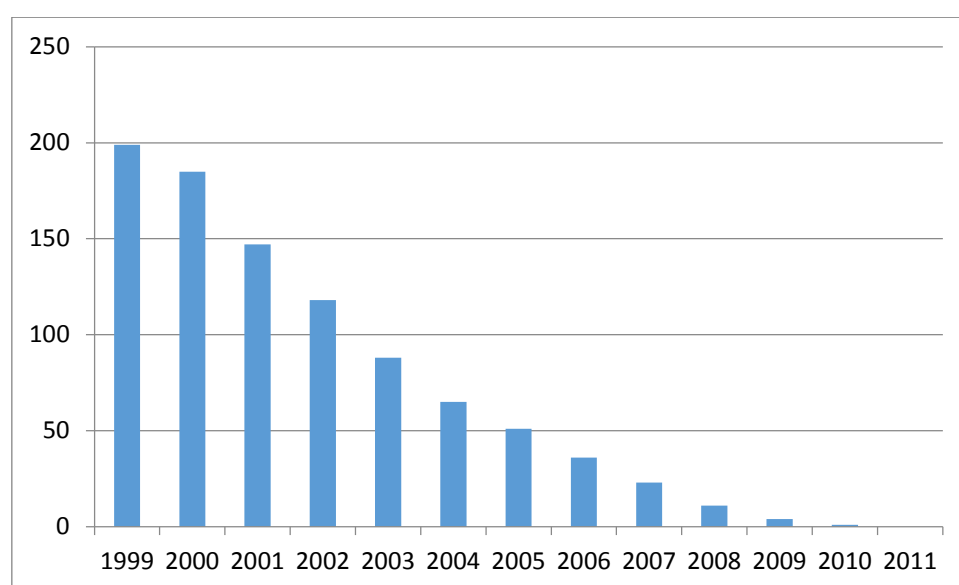
Second, it streamlined city services, unifying and simplifying management and offering early retirement to employees nearing retirement age, while protecting virtually all other jobs. This saved on workforce costs, but also helped to maintain morale and keep up the highest standards for the new and reclaimed areas and buildings.

Third, it strictly adhered to its no debt policy. By adopting a policy of only funding what it had the actual resources to pay for, the city government avoided the need for credit (no longer available) or the risk of unfundable debt and default, as in other Spanish regions. This effectively led to the winding down of Bilbao Ría 2000, which could no longer profit from development or land sales and had therefore accumulated debts it could not pay. This meant that some important development projects were suspended.

Fourth, key projects have remained in place, in spite of the recession, such as the expansion of the port of Bilbao and the promotion of the city internationally. The port today plays a fast developing role in import-export trade and in new energy markets, particularly liquid gas, which has helped to sustain Bilbao and the Basque economy, using again its former shipping traditions.

Fifth, the relatively new “business tourism” has continued to receive support. Bilbao Ekintza, the umbrella city body that deals with external relations, enterprise promotion and tourism, has a team of seven staff dedicated to official visits to the city from all over the world to learn from Bilbao’s “transformation” experience. Architecture and urban planning, minority culture and local languages, public safety and security risks, regional autonomy, debt reduction and financial management, human resource development, co-operative organisation, health care and bio-medical research, land reclamation, public transport, ancient building restoration, and “business tourism” are just some of the reasons official delegations arrive in Bilbao to learn from the city’s experience. The city council believes that promoting the “stamp of Bilbao” around the world, through hosting these visits, helps the local economy to survive. Bilbao’s name is now widely recognised, and with some mild surprise, city officials refer to the incoming tide (“marea”) of visitors that has not slackened in the recession. If anything, more cities are looking for solutions and turn to the unexpected success story, “against the odds”.

Figure 27: Debt (million Euros) 1999-2011



Source: City of Bilbao.

9. Attractions of the city

During the crisis, the city has continued to attract tourists, not quite at pre-crisis rates, but nor far below. Foreign tourists have kept coming but spend far less money. Spanish internal tourism is yet to pick up to pre-2008 levels.

2014 was a much better year for tourism and generally there is a sense that the economy is rounding the corner. Unemployment is falling and job creation is rising. No one expects things to return to how they were before the current double-dip recession, but some activities seem promising.

First, the Euskalduna conference and events centre has broken even with no public subsidy for several years and in 2013-14 generated a surplus. The Guggenheim is also a major draw.

Second, the University of Mondragon has taken over a large council building, adjacent to the town hall, where many city agencies used to be housed, to develop an innovative new “learn by doing” enterprise degree, accredited under the Bologna University validation agreement, attracting 30 students a year, who develop a workable, viable business over the 4 year programme of practical learning. The degree, based on a highly successful Finnish model, aims to generate two working co-operatives at the end of each course. The Finnish model of education uses the “learn by doing” method to develop enterprise and self-sufficiency under the title of “Leadership and Innovation”. Each student, over the 4 years, identifies 50 potential clients a year for a business idea that must be turned into a practical business and marketing plan in year 1. By year 2, it must generate income, which is recycled into the student’s education and the business itself. By year 4, the student will have work and learning experience in a Spanish and Finnish company, in an American IT company and in a Chinese factory. These travel experiences are funded from the earnings of the students’ enterprises. At the end of year 4, there should exist a viable co-operative business. In the first 2 years of graduation, at least one viable co-operative enterprise – Akkua Bilbao – has become established. The students work in a highly active, hands-on, collaborative way with their teachers. The city is animated by this youth-oriented, enterprise-focussed development.

Third, the Casco Viejo is alive with small shops, businesses, restaurants, cafes and small hotels. It is somewhat “gentrified” from its most decayed state 30 years ago, but it is hard to argue that this is against the interests of the city. One of the tasks of the city manager is to maintain contact with local networks of small shops, in the belief that “a healthy neighbourhood is one with nearby shops”. Although small local shops are losing out to bigger supermarkets, and the rate of loss is alarming the city, the housing density all over Bilbao at around 250 homes per hectare is enough to support local businesses. As most neighbourhoods are fairly mixed, or at least near to other types of areas, shops tend to be varied, domestic and reasonably cheap. People of all classes meet on the streets and mixed use is the norm, creating a lively, sociable atmosphere in the city. This pattern of mixed neighbourhoods has become stronger since the loss of heavy industry, and the absorption of second and third generation immigrants into the city. Many of them now speak Basque.

Figure 28: Casco Viejo



Figure 29: Bilbao City Council (Ayuntamiento)



Fourth, groups of young entrepreneurs have taken over an abandoned old factory in Zorrozaurre, the regeneration area in the dock area. There, they are experimenting with 3D manufacture, advanced digital start-ups and other new ideas, linked to the American Maker Movement. Special innovative finance companies are growing, providing credit to promising new start-ups, using crowd-funding methods, appealing to many small-scale supporters and investors to help.

Box 4: The Maker movement

The Maker Movement is a both a reaction to and an off-shoot of digital culture, new tools and electronic components that enable people to integrate the physical and digital worlds, at low cost, to innovate new products and projects. The movement, which began on America's West Coast, and carried forward by New York and Silicon Valley, is considered one of the seeds of the Third Industrial Revolution and has built a significant community around the world, including Bilbao.

Source: The Economist, 2011

Fifth, the city council has created emergency funds to help destitute and homeless people. It works closely with Caritas, the Catholic Social Action charity, and with the Red Cross, to prevent homelessness. It has also set up a drug and alcohol day centre, so that drug users can safely acquire needles and "street disturbance" is minimised. The whole of central Bilbao is surprisingly free of begging and obvious signs of destitution, common in Lisbon and Torino. The temporary and emergency shelters provided or funded by the city, the many church-based aid services and the council's own "Accion Social", a support service for vulnerable households, particularly the elderly, all prevent extreme need. The council uses its emergency funds to "bail out" people who run out of cash for basic needs – food, clothes, furniture – and also emergency health treatments. The city has retained a highly pro-active and inclusive stance in keeping these supports in place.

Sixth, the Zamudio technology park is thriving and managing to keep up employment and enterprise levels. This model of enterprise development is being copied in other enterprise centres, often set up in remodelled old factory buildings. Even the smallest start-up idea is encouraged.

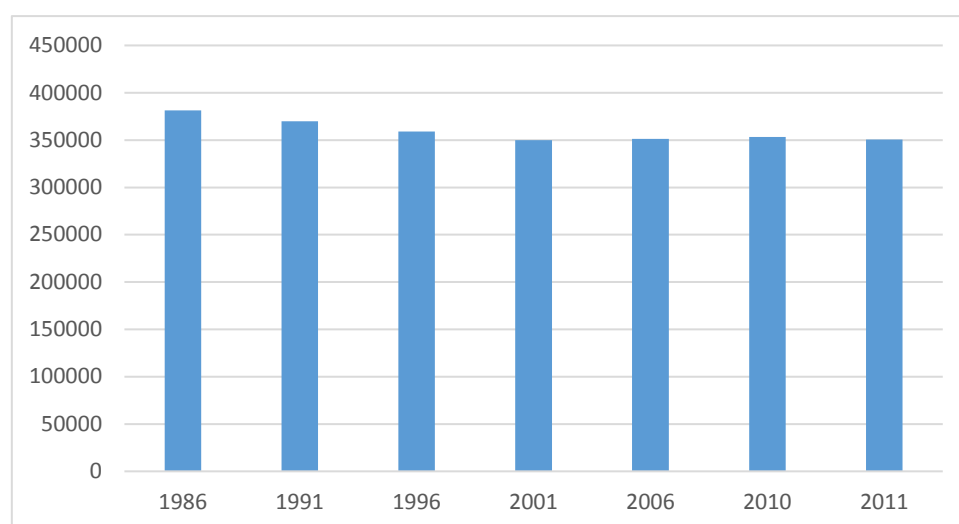
Seventh, there are many excellent, relatively new or modernised, public amenities in Bilbao, all of which need maintenance. There is a powerful accord between the Mayor's office and the city's Director of Municipal Services, to maintain a high standard of all street maintenance, including lights, refuse collection and disposal, all public spaces and parks, all public facilities and amenities. Responsibility lies within the city, except for swimming pools and some IT – the only services to be contracted out. The city's core commitment to run services well, with strong management, serious training and development, using innovative methods, shows in strikingly clean, attractive street conditions, in spite of the crowds of people, narrow streets and dense pattern of buildings.

A striking example of modern city management are the eight neighbourhood managers, each responsible for a district of the city. Their job is to keep contact with all local associations, organisations and businesses, and to frequent public meeting places and events, with a view to picking up quickly on problems, making direct contact with those responsible, and resolving the problems with the relevant service within days. The philosophy of the city manages is to be in touch at city policy level, neighbourhood and street level, and finally on the door step. 20,000 complaints or problems are resolved each year this way. The

neighbourhood approach goes under the banner of “Corazones de Barrio” giving each neighbourhood a “heart”, a distinctive character and identity. Overall, 85% of Bilbao citizens say they are satisfied with the public maintenance services of parks and streets – an impressive achievement with 200 less staff than six years ago, tight budgets and no debt.

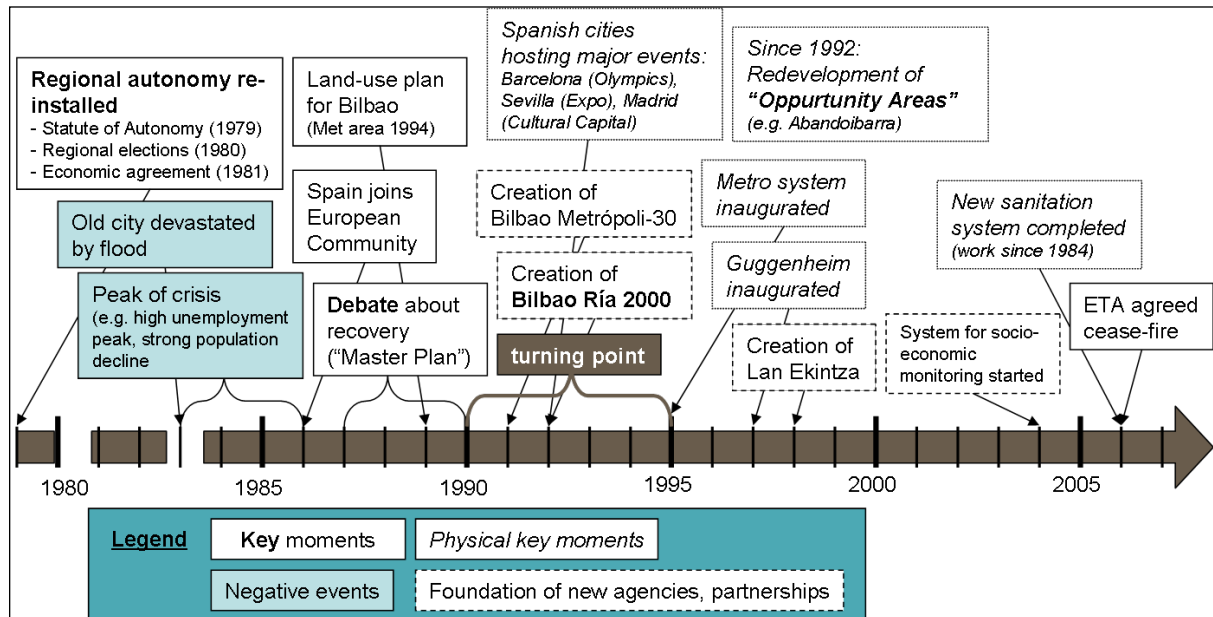
Overall, the city is maintaining services to a high level, using austerity as a tool of economy, rather than as a destructive force. It is following its pay-as-you-go policy and not incurring debt, but it seems to target local revenue carefully on pragmatic problem-solving, outreach and innovation. It is worried about unemployment and its consequences, now a regional responsibility rather than a city responsibility. But job prospects look strong for Greater Bilbao and there is some optimism that the economy is beginning to recover. Until Spain is out of the Euro crisis and the overall European economy begins to recover, Bilbao will struggle. But that struggle is holding or gaining ground – again! Unemployment is declining, the population is stable, and although industry is still declining in the city, new high-tech industrial enterprises are starting up in the surrounding provinces.

Figure 30: Bilbao Population, 1986-2011



Source: City of Bilbao.

Figure 31: Timeline of important events in Bilbao since the late 1970s



Concept and design: J. Plöger.

Conclusions

Bilbao has weathered the long crisis of the Euro, its bank failures, its high public debt, its housing crash and shocking unemployment levels. Yet the city fared better than most other Spanish cities and better than expected.

The local economy has continued to lose manufacturing jobs but the strength of that sector in metropolitan Bilbao has survived and encouraged the growth of new green technologies, renewable energy and high-tech start-ups.

The growth in international tourism during the recovery period has slowed, but not fallen back too far. Meanwhile, the expansion of Bilbao's reputation as an international conference host has sustained and grown a new kind of "business tourism", particularly in the international medical research field. It is proving very lucrative and useful in the local development of research and bio-medical engineering.

The European Union's decisive support for the transformation of Basque infrastructure – industrial wastelands, obsolete buildings, disused docks, decayed working class neighbourhoods, transport and energy infrastructure – has given Bilbao a strong base from which to sustain its many small and medium enterprises. Bilbao and Spain are strongly engaged in European networks, along with Barcelona, Sevilla and other Spanish cities. This helps promote the city's image and progress.

The focus on reskilling, retraining, R&D, new start-ups, enterprise development, technology transfers and many other forms of know-how have in fact turned a largely industrial and devastated landscape into an attractive mainly post-industrial city, while keeping its strong manufacturing skills alive. This has fostered new enterprise creations such as those found in Zamudio and Mondragon. Bilbao's powerful, well organised, efficient city government has managed a shrinking budget with remarkable skill, sustaining the city's attractions and assets without bursting its budget. In the wide transformations of the last 35 years lies the pathway to Bilbao's best prospects.

Bibliography

- Ayuntamiento de Barakaldo (n/a) Avance del Plan General de Ordenación Urbana.
- Ayuntamiento de Barakaldo (n/a) Barakaldo – un plan que se hace realidad. Plan General de Ordenación Urbana de Barakaldo (PGOU).
- Barreiro, P. and Aguirre, J. 2005. "25 años del plan integral de saneamiento de la Ría de Bilbao", in *DYNA* (enero-febrero), pp. 25-30.
- BBC News Online 11th November 2015, *Catalonia's push for Independence from Spain* <http://www.bbc.co.uk/news/world-europe-29478415>, accessed 14th June 2016
- Beascochea, J. M. 2003. "Jerarquización social del espacio urbano en el Bilbao de la industrialización", in *Scripta Nova – Revista Electrónica de Geografía y Ciencias Sociales* VII(146). [http://www.ub.es/geocrit/sn/sn-146\(022\).htm](http://www.ub.es/geocrit/sn/sn-146(022).htm).
- Bilbao Ayuntamiento – Viviendas Municipales. 2006. *Memoria Viviendas Municipales*.
- Bilbao Ayuntamiento. 2007. *La metamorfosis de la metropolis industrial de Bilbao*.
- Bilbao Metropoli 30. 2007. *City and Values*.
- Bilbao Observatorio (Mayo 2013). *Síntesis socioeconómica de Bilbao*. Bilbao Ekintza http://www.bilbao.net/cs/Satellite?pagename=LanEkintza/Page/LKZ_PTPaginaGenerica&c=Page&cid=1272964600296&locale=3000001694.
- Colantonio, A. 2012. *The Hiriko CityCar Project*.
- Del Cerro Santamaría, G. 2007. *Bilbao: Basque Pathways to Globalisation*, Oxford: Elsevier.
- Departamento de economía y hacienda. 2011. *25 años de Euskadi en Europa: La ayunda a Euraski de los fornos estructurales europeas 1986-2011*. Gobierno de Vasco: País Vasco.
- Deputación Foral de Bizkaia. 2012. *Bilbao Bizkaia. Turismo 2012*. Ayuntamiento de Bilbao: Bilbao.
- Diputación de Foral de Bizkaia. 2011. "Estrategia de la diputación foral de Bizkaia para el desarrollo sostenible". *Programme Bizkaia Egitasmoa 2011-2016*: 21.
- Domingo, M. 2005. "Vivienda obrera en Bilbao y el bajo Nervión: Las casas baratas, una nueva forma de alojamiento (1911-1936)". Doctoral thesis, Universitat de Girona, Girona.
- Donner, C. 2000. *Housing policies in the European Union. Theory and Practice*. Ernst Becvar Verlag: Vienna.
- El País. 2013. "La Monarquía obtiene su nota más baja en los encuestas."
- El País. 2014a. "Así es el votante de grulos y trabajos en los barrios."
- El País 2014b. "La mayoría de los votantes de Podemos tiene entre 34 y 54 años."
- El País 2014c. "Los círculos del descontento Podemos trae en jaque a la izquierda en Euskadi."
- El País 2014d. "Barcelona advierte a los 'okupas' de Can Vies, de que 'el tiempo se agosta'."
- Empananza, P. 2007. "Sustainable land and transport planning in Metropolitan Bilbao", *Paper presented at City Reformers Group Meeting*, Sept. 2007, London.
- Euskal Irrati Telebista. 2012. *Prototype of the electric car Hiriko unveiled at UN Headquarters*.
- Eustat. 2013. Population of the A.C of the Basque Country by territorial area, age, sex and period.
- FUNCAS. 2014. *Focus on Spanish Society*. Social Studies Office of the Spanish Savings Banks Foundation: Madrid.
- Gómez, M. 1998. "Reflective Images: The Case of Urban Regeneration in Glasgow and Bilbao", *International Journal of Urban and Regional Research*, 22(1), pp 106-121.
- González, S. 2005. "The Politics of the Economic Crisis and Restructuring in the Basque Country and Spain during the 1980s." *Space and Polity*, 9(2), pp 93-112.
- González, S. 2006. "Scalar narratives in Bilbao: a cultural politics of scales approach to the study of urban policy." *International Journal of Urban and Regional Research*, 30(4), pp 836-857. <http://www.eitb.eus/en/news/technology/detail/818492/prototype-the-electric-car-hiriko-unveiled-eu-headquarters/>
- Instituto Nacional de Estadística. 2014. *Contabilidad Regional de España: Serie 2010-2013: País Vasco*.
- Instituto Nacional de Estadística. 2014. *Contabilidad Regional de España: Serie 2010-2013: Bizkaia*.
- Juan, A. 2011. *BILBAORía2000: Bilbao after 2010, looking ahead*. Weak Market Cities Group seminar.
- Lan Ekintza, Bilbao Ayuntamiento. 2002. Informe-Resumen del Estado sobre características de la población extranjera residente en Bilbao.

- Lan Ekintza, Bilbao Ayuntamiento. 2005. Anuario Socioeconómico de Bilbao 2004.
- Lan Ekintza, Bilbao Ayuntamiento. 2006. Memoria 2005.
- Lan Ekintza, Bilbao Ayuntamiento. 2007. Anuario Socioeconómico de Bilbao 2006.
- Lee, D. 2007. 'Bilbao, 10 years later', *New York Times*, 23 September 2007.
- LSE Housing and Communities. 2006. *Weak Market Cities Programme: Quick guide to city reform – Bilbao*. London: LSE.
- Mangen, S.P. 2004. *Social exclusion and inner city Europe – regulating urban regeneration*, Houndsmills/New York: Palgrave Macmillan.
- Meyer, K. 2001. "El Guggi und Los Fosteritos, Die Revitalisierung von Hafen- und Industriebrachen im Großraum Bilbao", in D. Schubert (ed) *Hafen- und Uferzonen im Wandel: Analysen und Planungen zur Revitalisierung der Waterfront in Hafenstädten*, Edition Stadt und Region, no 3, Berlin, pp. 295-318.
- Mondragon Corporation. 2013. *Mondragon Corporate Profile 2013*.
- Mondragon Corporation. 2010. *Tu Lankide. La revista de Mondragon taldeko aldizkaria*.
- Mondragon Corporation. 2011. *Tu Lankide. La revista de Mondragon taldeko aldizkaria*.
- Plaza, B. 2000. 'Política industrial de la comunidad autónoma del País Vasco: 1981-2000', *Economía Industrial*, no 335/336, pp. 299-314.
- Plaza, B. 2006. "The Return on Investment of the Guggenheim Museum in Bilbao". *International Journal of Urban and Regional Research*, 30(2), pp. 452-467.
- Plaza, B. 2007. "Museums as economic re-activators: challenges and conditions for their effectiveness", paper presented at EURA Conference, Glasgow, 12-14 September.
- Plöger, J. 2008. *Bilbao City Report*. CASEReport 43. London: LSE
- Rehabilitando la Rehabilitación: Tribuna Javier Burón Cuadrado*. 2011.
- Rodríguez, A. 2002. Reinventar la ciudad: Milagros y espejismos de la revitalización urbana en Bilbao, *Lan Harremanak* 6, pp. 69-108, <http://www.ehu.es/lsvweb/webcentro/cas/publicaciones/numeros/revista6.pdf>.
- Rodríguez, A., Martínez, E. and Guenaga, G. 2001. "Uneven Redevelopment – New Urban Policies and Socio-Spatial Fragmentation in Metropolitan Bilbao". *European Urban and Regional Studies* 8(2), pp. 161-178.
- Rodríguez, A., Martínez, E. and Guenaga, G. (Date not known) Bilbao – Abandoibarra, <http://www.ifresi.univ-lille1.fr/SITE/URSPIC/Raphtml/Bilbao/Bilbao.htm>.
- Siemiatycki, M. 2005. "Beyond moving people: excavating the motivations for investing in urban public transit infrastructure in Bilbao, Spain." *European Planning Studies Journal*, 13(1), pp. 23-44.
- Surbisa Bilbao, Bilbao Ayuntamiento. 2005. *Memoria 2004*.
- The Economist. 2011. *More than just digital quilting*. <http://www.economist.com/node/21540392>. Accessed 27 May 2016.
- The Economist. 2012. *Hiriko Vert*.
- The Economist. 2013. *Trouble in worker's paradise*.
- The Guardian. 2014. "First imports of 'dirty' tar sands oil arrives in EU". <http://www.theguardian.com/environment/2014/jun/06/first-tar-sands-oil-shipment-arrives-in-europe-amid-protests> Accessed 27 May 2016.
- Zubiri, I. 2000. *El sistema de concierto económico en el contexto de la Unión Europea*, Círculo de Empresarios Vascos.